# Project Information Illabot Road

#### Introduction

Illabot Creek is an important anadromous fisheries resource, and is a major tributary to the Skagit River, which provides an estimated 30% of the young anadromous fish entering salt water in Puget Sound. Illabot Creek contains Chinook, coho, as well as sea-run and resident populations of cutthroat, rainbow (steelhead), and bull trout. Illabot Creek provides fish migration, refuge and rearing habitats. The Illabot main stem is accessible to steelhead and coho salmon to river mile (RM) 10.2, bull trout to RM 13.7, pink and chum salmon to RM 1.6, and Chinook salmon to RM 5.6. The main fish habitat limitations are lack of quality rearing and spawning habitat and low pool/riffle ratios in some areas. Sedimentation fills in pools, reducing their depth and/or numbers, and also affects rearing and spawning areas.

Most of Road 16 was constructed on National Forest System lands in the early 1960s to provide access for timber harvest in the Illabot Creek watershed (project map). At that time, there was no trail to Slide Lake. However a trail to Illabot Lake began on private land approximately 1.5 miles north of the National Forest boundary and followed the south bank of Illabot Creek. The Slide Lake Trail (Trail 635) was constructed after road access was created and a user created trail developed from Slide Lake to Enjar Lake. Trail access to Jordan, Falls, and Marten Lakes originated mostly from private timberlands to the north. Road closures on private land and the extension of Road 16 in the 1980s resulted in the development of the user-built trails originating from Road 16 that now access Jordan, Falls, and Marten Lakes. These trails were not constructed by the Forest Service, do not meet Forest Service trail standards, and have never been maintained by the Forest Service. However, these user built trails were added to the Mount Baker-Snoqualmie National Forest inventory of System Trails and currently are the easiest access to these wilderness lakes.

The Illabot Creek watershed east of the junction with Road 1620 is either Late Successional Reserve or Wilderness. Since there is no planned timber harvest from these areas, Road 16 beyond its junction with Road 1620 is used for trail access and dispersed recreation.

Funding is not, and has not been, sufficient to maintain all of the roads on the Mount Baker Ranger District. To adequately maintain the 505 miles of drivable roads on the District would require more than \$750,000 each year. The current annual road maintenance budget is \$60,000 or 8% of the need. Over the past five years special congressional appropriations such as Legacy Roads and the American Recovery and Reinvestment Act have increased the funds

available for road maintenance to an average of \$194,000 each year. Although these special appropriations have increase the road maintenance budget to 26% of the amount needed, they must be spent on specific roads and are only available for one year.

In the 1990s and early 2000s, limited road maintenance funds were used mostly to brush roads and maintain vehicle access on as many roads as possible and blade road surfaces to reduce potholes. As a result, maintenance of drainage structures (culverts, ditches, etc.) was not sufficiently performed, road signs were not replaced, and surfacing was rarely replaced. The insufficient maintenance of drainage structures contributed to increased rates of road damage due to storm events.

Following the national Forest Service Roads Policy of 2001, the District has been reducing the number of miles of drivable roads to address the 2001 Policy goals of a safe, environmentally sound road network that is responsive to public needs and affordable to manage. Given the declining road maintenance budget projections, only through further reductions in the total miles of road requiring maintenance can all the remaining drivable roads receive the maintenance needed to avoid flood damage and the desired level of road surfacing and signage.

Much of Road 16 was constructed at slope breaks, using excavation techniques with uncontrolled fill placement and inadequate drainage systems. The road had some drainage correction competed as recently as 1995; however, road-related fill slope failures continue to occur, and some have been noticeable contributors of sediment to Illabot Creek. Erosion and sedimentation from these events resulted in reduced water quality, burial or scouring of spawning gravels, and loss of fish habitat.

From Mile Post (MP) 10 to MP 18, Road 16 is highly susceptible to road prism slumping on the downhill side and upslope material sliding onto the road surface. Side slopes in this road segment average at least 60% with long distances of 80% to 100% slopes. At many locations along this road segment water seeps down rock faces on the road's uphill side into the road prism and under the road. This situation results in a high frequency of road slumps. As a result of the near surface bedrock, road fill slope failures and upslope slides are common. Repairs to these steep sections of road slopes would be very expensive and in some cases may not be repairable at all without extensive road shifts into vertical rock cliffs that are cost prohibitive.

Because of the susceptibility of Road 16 to slumps and slides, road maintenance costs are higher for this road that other roads on the Ranger District. Although Road 16 accounts for only 2.3% of the District's road miles, it consumed 5.5% of the road maintenance budget from 2007-2010. Furthermore, almost all culverts on Road 16 have exceeded their life expectancy. These

culverts are undersized for adequate drainage and need to be replaced with larger culverts and additional cross-drains.

The Mt. Baker-Snoqualmie Forest Plan, as amended, includes Forest-wide standards and guidelines direction to develop and implement projects to correct road related water quality, anadromous fish habitat, and other resource problems; and to operate, maintain, and/or close roads to meet established road management objectives and safety (Forest Plan p. 4-140).

#### **Need for Action**

There is a need for a reduction in the risk of failure of Road 16 and the resultant sediment production that would reduce water and fish habitat quality in the main stem and lower tributaries of Illabot Creek.

There is a need for a reduction in the total cost of maintaining roads on the Mount Baker Ranger District so that adequate maintenance is performed on roads remaining open to vehicle traffic.

### **Purpose**

The purpose of the Illabot Road Project is to reduce 14.5 miles of road open to motor vehicle use and reduce annual road maintenance needs by \$8,500. The purpose also includes reducing the risk of degrading water and fish habitat quality.

## **Proposed Action**

The Forest Service is proposing to decommission 14.5 miles of the Illabot Creek Road (Road 16) from mile post 9.5 (its junction with Road 1620) to 24 (Project Map). Road decommissioning will consist of culvert removal and replacement with rocked rolling dips. Road fill slope will be stabilized by removing sidecast material and recontouring the road prism. Excess side cast material will be stored on the road bed or hauled to designated locations on spur roads or off site. Stored fill would be compacted and shaped to allow drainage. The proposal will also remove a steel bridge crossing Otter Creek for use elsewhere, and the removal of a concrete bridge over Illabot Creek that would be burried in pieces at suitable locations along the road or placed on spur roads. The Slide Lake trail and trailhead will be abandoned and removed from the Trail System Inventory. The Jordan, Marten, and Falls Lakes trails will also be removed from the Inventory.

## **Alternatives to the Proposed Action**

- 1. No Action. Maintain the road in its current condition.
- 2. Maintain road access to the current location and reduce the risk of road failure where failure risk is highest. This alternative would involve installing rock gabion baskets or similar structures to

- stabilize slumping road shoulders, increasing the number and size of drainage structures, and converting three culverts to bridges.
- 3. Decommission up to the last 10 miles of Road 16 (from MP 24 back to MP 14.1 approximately 1 mile west of Bluebell Creek) as described in the proposed action, except retain the bridge over Illabot Creek. Reduced the risk of road failure risk as described in Alternative 2 from the National Forest boundary to MP 14.1. This alternative would convert up to five miles of the road to the Slide Lake Trail which would require placing trail bridges over several drainages after culverts are removed. In addition, a trail head would be developed at the new road terminus. The new trailhead would involve clearing less than one acre of second-growth forest and placing rock surfacing in the parking area.